Patent claims:

1. A microcapsule containing at least one polymerization initiator.

2. The microcapsule as claimed in claim 1, characterized in that it contains a polymerization initiator for unsaturated polyester resins.

3. The microcapsule as claimed in claim 1 or 2, characterized in that the polymerization initiator is a free radical initiator.

4. The microcapsule as claimed in any of claims 1 to 3, characterized in that the polymerization initiator is a C-C-labile compound.

5. The microcapsule as claimed in any of claims 1-4, characterized in that the capsule shell is designed in such a way that it decomposes at the curing temperature of the polymer composition to be cured.

6. The microcapsule as claimed in any of claims 1 to 5, characterized in that the capsule shell contains organic polymers or consists thereof.

7. The microcapsule as claimed in any of claims 1 to 6, characterized in that the capsule shell contains polyurethanes, melamine resins or epoxy resins or mixtures of at least two of said compounds or consists of said compounds.

8. A process for the production of the microcapsules as claimed in any of claims 1 to 7, characterized in that

a) a solution containing a polymerization initiator for the organic polymer used for the production of the capsule shell is prepared,

b) a solution containing the organic polymer and polymerization initiator is prepared,

c) the solutions are mixed and

d) if required, processed to give a powder.

9. The process as claimed in claim 8, characterized in that, in step c), the solutions are stirred with one another to a droplet size of 1 to 20 µm, preferably of 3 to 15 µm.

10. The process as claimed in claim 8 or 9, characterized in that the mixture obtained from step c) is cooled and spray-dried in step d).

11. The use of the microcapsules as claimed in any of claims 1 to 6 for the polymerization of polyester resins.

12. The use as claimed in claim 11 for the preparation of casting resins and impregnating resins for the electrical industry.

13. The use as claimed in claim 11 for the preparation of fiber-reinforced unsaturated polyester resins.